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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,913	03/31/2004	Yukinori Otsuka	023484-0164	5704
22428	7590	10/17/2006	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				KING, BRADLEY T
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/812,913	OTSUKA, YUKINORI
	<b>Examiner</b> Bradley T. King	<b>Art Unit</b> 3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 August 2006.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4-7,9-21,23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2,5-7,12,13 and 15-19 is/are allowed.
- 6) Claim(s) 1,4,9-11,14,20,21,23 and 25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date: _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-06</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 9-10, 14, 20-21, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-118215 in view of Tamaoki et al (US# 5458150).

JP 9-118215 discloses a valve unit including; a yoke of magnetic metal 25-26, the yoke including upper 25-26a and lower 25-26ba walls that are integrally connected by side walls; a slit in the upper wall of the yoke (spacing between 25-26a), the slit extending along a longitudinal axis of the yoke between axially opposed ends of the yoke, and solenoid coils 23 having terminal members 27-28 projected outward from the yoke through the slit, wherein the terminal members of every pair of the electromagnetic valves, which face each other with respect to the longitudinal axis of the yoke, are arranged close to one another and face one another. See figure 3. JP 9-118215 lacks the disclosure of an integral middle portion connecting the wall portions of the lower wall. Tamaoki et al disclose a similar valve unit and further teach the desirability of integral construction. Note for instance the abstract, column 1, lines 37-41 and figure 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the yokes of JP 9-118215 in an integral fashion as taught by

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Tamaoki et al decrease the size of the device, thereby facilitating vehicle installation and reducing manufacturing costs. Also note *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

Regarding claims 21, 23 and 25, see figure 5.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-118215 and Tamaoki et al (US# 5458150) in view of WO 00/70628.

JP 9-118215 and Tamaoki et al disclose all the limitations of the instant claims with exception to the explicit disclosure of the terminal portions contacting the slit edges. WO 00/70628 disclose a similar valve yoke structure and further teach the utilization of a slit edge to hold and maintain terminal ends of coil members. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the slit edge of JP 9-118215 and Tamaoki et al to hold the terminal ends as taught by WO 00/70628 to improve the retention and positioning of the electrical connectors, thereby increasing the durability of the device.

#### ***Double Patenting***

Applicant is advised that should claim 4 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing

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one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

***Allowable Subject Matter***

Claims 2, 5-7, 12-13, and 15-19 are allowed. The prior art of record fails to suggest the strip exhibiting resiliency integrally formed with the lower wall.

***Response to Arguments***

Applicant's arguments filed 8/02/2006 have been fully considered but they are not persuasive.

Regarding the combination of Tamaoki and Hideaki, it is noted that Hideaki is directed at an integral construction of a valve block and further identifies the need of slots, opens or thinned portions to prevent magnetic flux from interfering between valves. Note the background of invention. It is further noted that the teachings of Hideaki are applied to both top and bottom portions. See figures 2-3 and 5-6. It is maintained that it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Tamaoki in an integral construction as taught by Hideaki to simplify the assembly by reducing the number of separate parts required. Also note *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

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***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BTK



BRADLEY KING  
PATENT EXAMINER

10/14/26